

NOVITATES ZOOLOGICAE.

Vol. V.

MARCH, 1898.

No. 1.

DESCRIPTIONS OF THREE NEW MAMMALS FROM THE EAST INDIAN ARCHIPELAGO AND AUSTRALIA.

By OLDFIELD THOMAS.

BY the kindness of Mr. Rothschild I have been entrusted with the determination of some mammals recently received at the Tring Museum, and among them two are new, one representing a new genus of Rodents. At the same time I take the opportunity of describing a new *Sminthopsis* from Australia recently received at the British Museum.

*Mallomys** gen. nov. (*Muridae*).

Allied to *Crateromys* and *Lenomys*.† External form strictly murine. Fur long and thick. Ears short. Tail long, scaly, almost naked. Pollex with a short nail; all other digits with strong curved claws.

Skull large and powerful, more heavily built than that of *Crateromys*. Interorbital region broad, inflated and convex on each side anteriorly, then in its posterior half the inflation disappears, to be replaced by sharp vertical ridges, between which the mesial part of the frontal is deeply concave. These ridges are very short, and when reaching the anterior corner of the squamosal they turn abruptly outwards and downwards, so as, with the anterior edge of the squamosal, to enclose a deep vertical groove or concavity running down the postero-internal wall of the orbit. Brain-case proper scarcely ridged at all. Interparietal large, its anterior edge evenly convex. Outer plate of zygoma root slightly projected forwards. Palatal foramina of medium length. Posterior edge of palate level with the middle of m^3 . Bullae small.

Teeth.—Upper incisors ungrooved, yellow in front, their wear such that their outer corners project downwards as sharp points. Molars very large and heavy, so broad that the palate between the anterior molars is narrower than the teeth themselves. In pattern they have a strong general resemblance to those of *Lenomys*,‡ with similar isolated cusps and posteriorly projecting processes of enamel; the number of cusps is however different, as both the internal and external cusps of the last lamina of m^1 are absent, as is the case with m^2 , while in m^3 there are no definite outer cusps; the molars have therefore the following numbers of lateral cusps, outer 2—1—0, inner 2—2—3, as opposed to the 3—2—2 and 3—3—3 of *Lenomys*. Below the molars are very like those of *Crateromys*.

Type: *M. rothschildi*.

* μάλλος, wool.

† Genus proposed in the account of Mr. Whitehead's Philippine mammals, now in the press. It is based on *Mus meyeri* Jent.

‡ Figured *Trans. Zool. Soc.* XIV, Pl. XXXVI, fig. 1.

It seems probable that Jentink's *Mos armandvillei** from Flores is also a member of this genus, but as the palate and teeth only of a young specimen are figured, and not the whole skull, I am unable to be quite certain about it. Geographically its inclusion in *Mallomys* is very probable, as the relatives of that genus occur in Celebes and Luzon. The three genera *Mallomys*, *Lenomys*, and *Crateromys* form in fact a little group characteristic of the eastern half of the East Indian Archipelago—viz. Philippines, Celebes, New Guinea, and perhaps Flores. This distribution is suggestively similar to that of the *Hydromyinae* (Philippines, New Guinea, Australia) and of the *Rhynchomyinae* (Philippines and Celebes).

1. *Mallomys rothschildi* sp. nov.

Size large, nearly equal to *Crateromys schadenbergi*. Fur very long and thick, the woolly underfur about 30—35 mm. long on the back, and the longer hairs, which are comparatively few in number, nearly twice that length. General colour all over blackish with a silvery grey suffusion, the wool-hairs being pale greyish with either silvery or blackish tips, the very long hairs black with whitish bases. Undersurface like the underfur of the back, greyish white, with very few black hairs intermixed. Whiskers black. Ears short, hardly projecting beyond the fur, thinly haired, brown. Hands and feet black above; claws white basally and at their tips, brown mesially. Tail in rather bad condition, but apparently brown basally and rather lighter terminally; the scales very large, and not hidden by the few short hairs.

Skull and teeth as described above.

Dimensions of the type, an adult *male*, measured on the stuffed specimen, and therefore only approximate:—

Head and body (*c.*) 400 mm.; tail 380; hindfoot 65; ear (contracted) 22.

Skull: basilar suture to gnathion 57.5; lambda to nasal tip 63.5; greatest breadth 36; breadth outside m^1 14, inside m^1 3.5; nasals 27×9 ; interorbital breadth 10; palate, length from henselion 36; diastema 21.5; palatal foramina 14×5.3 ; length of upper molar series 16.3.

Hab. Between Mounts Mnsgrave and Scratchley, British New Guinea.

The type is stuffed, in the Tring Museum. Its skull is in the British Museum.

This fine rodent I have ventured to name in honour of Mr. Walter Rothschild, by one of whose native collectors it was obtained, and to whose generosity the British Museum is indebted for the donation of its skull, and also of the *Phalanger* next to be described.

2. *Phalanger melanotis* sp. nov.

Closely allied to *Ph. ursinus* Temm., but rather smaller, shorter tailed, and very different in colour. Fur thick and close, not mixed with longer black hairs projecting beyond the wool-hairs. General colour silvery or hoary, becoming pale yellow on the hands, feet, and furry part of tail. The hoary tone is obtained by the light rings on the hairs, coppery or yellow in *Ph. ursinus*, being silvery whitish, and hiding the black of the basal part of the hairs much more completely, so that the whole animal, instead of being black picked out with light, is light with a slight indication of a darker suffusion on the body; on the hands, feet, and

* Weber's *Zool. Ergebn.* II, p. 78, Pl. V, figs. 1-7, 1892.

tail even this suffusion is not visible. Hairs of head directed forward from the crown, though this may be due to the make of the skin: no darker suffusion there visible. Ears short, buried in the fur, the black of their backs more, and the yellowish or orange of their inner surface less, developed than in *ursinus*, so that instead of appearing fulvous or orange on a black ground, the ear is conspicuously black on a whitish ground, whence the name I have chosen for the species. Undersurface pale yellowish, instead of dark ochraceous, the hairs dark brown at their bases. Tail decidedly shorter than in the allied species, the reduction being mainly or entirely in the naked portion: furry portion above and below pale yellow.

Skull and teeth very much as in *Ph. ursinus*; the distance between the orbits is, however, decidedly less, and the supraorbital edges are sharper and less inflated. Only one small intermediate tooth present on each side below.

Hab. Lirung, Talaut Islands. Three specimens obtained by native collectors.

Dimensions, from skin, approximate:—

Head and body 450 mm.; tail* 335, naked part of tail above 130, ditto below 210.

Skull: basal length 79; greatest breadth 55; nasals, length 27, greatest breadth 13.3, least breadth 9; interorbital breadth 12.3; palate, length 45; palatal foramen 5.5; basi-cranial axis 29.5; basi-facial axis 49. Teeth, horizontal length of last premolar 5.7; length of ms^{1-3} 19.

The occurrence of this fine Cuscus in the Talaut Islands, where it evidently represents *Ph. ursinus*, is a matter of great interest, and Mr. Rothschild is to be congratulated on its discovery. Of the three specimens collected, he has been generous enough to present one to the British Museum, the others, which Mr. Hartert assures me are quite similar, being in the Tring Museum.

3. *Sminthopsis hirtipes* sp. nov.

Size medium. Colour apparently, so far as can be judged from a spirit specimen, much as in the ordinary species without special face-markings, more or less fawn above, white below, the hairs slate-coloured at base. Ears very large, laid forward in a spirit specimen they reach some way beyond the anterior caudus of the eye. Hands and feet quite different to those of any other species, and more recalling those of some of the African Gerbilles. Hands with a large trefoil-shaped elevation occupying the whole of the palm, the elevation being covered all over with fine silvery hairs, and with no normal pads on it at all; the undersurface of the digits, however, is naked and very finely granulated. Similarly the feet are hairy below throughout, except just along the middle line of the digits; on the terminal part of the metatarsus there is, as on the hand, a large hairy elevation without any pads; all the hairs of the foot, above as well as below, are longer than usual, and especially those along the outer surface, where they form a distinct silvery fringe from the ankle to the tip of the fifth toe. Tail long, slightly incrassated for its basal half, dull whitish throughout.

Skull similar in its general outlines to that of *S. crassicaudata*, but larger, more heavily built, and with decidedly larger bullae. No trace of postorbital processes. Proportions of upper premolars much as in *S. leucopus*.

* Probably shrunk; vertebrae taken out.

Dimensions of the type, an adult *male* in spirit :—

Head and body 76 mm.; tail 81; hindfoot 19; ear 22·5.

Skull: basal length 24; greatest breadth 15·3; interorbital breadth 5·1; palate, length 13·2; combined lengths of ms¹⁻³ 4·7.

Hab. Station Point, Charlotte Waters, Interior of South Australia.

This striking little species comes from very much the same locality whence several small marsupials have been obtained and described by Professor Baldwin Spencer, to whom the British Museum is indebted for a valuable series of the species described by him. None of these, nor so far as I know any other described form, has the remarkable foot-structure of *S. hirtipes*, a structure so strikingly like that found in the similarly desert-hunting Gerbilles of the restricted subgenus *Gerbillus*.

NOTE ON SOME KANGAROO HYBRIDS.

By THE HON. WALTER ROTHSCHILD.

HAVING succeeded well in acclimatising the "Great Kangaroo," *Macropus giganteus*, and "Bennett's Wallaby," *Macropus bennetti*, in a state of freedom at Tring, I began in 1892 and 1893 to try the same experiment with other species, and I have had at different times Black Wallaby, Bridled, Striped, and Short-tailed Wallaby, Derbian Wallaby, Black Wallaroo, Parry's Wallaroo, and lastly Red Kangaroos (*Macropus ualabatus*, *Onychogale frenatus*, *Macropus dorsalis*, *M. brachyurus*, *M. derbyanus*, *M. robustus*, *M. parryi*, and *M. rufus*). None of these, however, would live well in a free state, and of all of them I only had in 1895 one female Red Kangaroo, *Macropus rufus*, left at liberty. This animal paired with a male "Boomer" (*Macropus giganteus*), and produced, at the beginning of 1897, a female hybrid which, strange to say, was exactly like the mother and showed no trace of the father. At the time, knowing the many freaks which appear in hybrids, I took little notice of this creature, but this year (*i.e.* end of 1897) the same female Red Kangaroo produced a male hybrid from a "Boomer" which is of the most brilliant red colour, much brighter than any pure-bred Red Kangaroo I have seen, and also shows no trace of the male parent in its appearance. It seems therefore that in this case the female has more influence on the progeny than the male.